FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Victoria WLE, L.P.

> AUTHORIZING THE OPERATION OF Victoria Power Station Electric Services

LOCATED AT
Victoria County, Texas
Latitude 28° 47' 18" Longitude 97° 0' 36"
Regulated Entity Number: RN100214980

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No:	O35	Issuance Date:	August 3, 2016	
For the Co	mmission			

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC \S 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - **(4)** Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet. but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
 - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
 - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the

- air emission source or enclosed facility is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader
- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC \S 111.111(a)(8)(A), complying with 30 TAC \S 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC \S 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h/H]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)

- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
- F. Title 40 CFR § 60.14 (relating to Modification)
- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

6. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 7. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 8. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 9. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not

limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

- 10. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Requirements of the Electric Generating Unit Standard Permit for facilities located in the East Texas region based on the information contained in the registration application.

Compliance Requirements

- 11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 12. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Permit Location

13. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

14. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

15. For units VIC7 and VIC10 (identified in the Certificate of Representation as units 9 and 10), located at the affected source identified by ORIS/Facility code 3443, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.

- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO_2 and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO_2 emitted in excess of the acid rain emissions limitations for SO_2 shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or

- (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO_2 in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_v under 40 CFR Part 76.
- E. Excess emissions requirements for SO₂ and NO₃.
 - (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
 - (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of

representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

- (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
- (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
- (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other

- affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
 - (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Acid Rain Unit Exemptions

16. As reference only information, the following units VIC3, VIC4, VIC5, and VIC6 (identified as units 5, 6, 7, and 8 in the EPA Retired Unit Exemption form) have received acid rain unit exemptions and are not incorporated into the Acid Rain Permit.

Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

- 17. For units VIC7 and VIC10 (identified in the Certificate of Representation as units 9 and 10), located at the site identified by Plant code/ORIS/Facility code 3443, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements. Until approval of a Texas CSAPR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97.
 - A. General Requirements

- (i) The owners and operators of the CSAPR NO_x and the CSAPR SO₂ source shall operate the source and the unit in compliance with the requirements of the applicable CSAPR Trading Programs and all other applicable State and federal requirements.
- (ii) The owners and operators of the CSAPR NO_x and the CSAPR SO_z source shall comply with the requirements of 40 CFR Part 97, Subpart AAAAA for CSAPR NO_x Annual Trading Program, Subpart DDDDD for CSAPR SO_z Group 2 Trading Program, Subpart EEEEE for CSAPR NO_x Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.

B. Description of CSAPR Monitoring Provisions

- (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR SO₂ Group 2 Trading Program, and CSAPR NO_x Ozone Season Group 2 Trading Program.
 - (1) For unit(s) VIC7 and VIC10, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO_x, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for SO₂ and heat input.
- (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), §§ 97.730 through 97.735 (CSAPR SO₂ Group 2 Trading Program), and §§ 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.
- (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources.
- (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.435 (CSAPR NO_x Annual Trading Program), § 97.735 (CSAPR SO₂ Group 2 Trading Program), and/or § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.

- (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.430 through 97.434 (CSAPR NO_x Annual Trading Program, §§ 97.730 through 97.734 (CSAPR SO₂ Group 2 Trading Program), and/or §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.435 (CSAPR NO_x Annual Trading Program), § 97.735 (CSAPR SO₂ Group 2 Trading Program), and/or § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- (vi) The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR §§ 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), §§ 97.730 through 97.734 (CSAPR SO₂ Group 2 Trading Program), and §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.
- 18. CSAPR NO_v Annual Trading Program Requirements (40 CFR § 97.406)
 - A. Designated representative requirements
 - (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative. in accordance with 40 CFR §§ 97.413 through 97.418.
 - B. Emissions monitoring, reporting, and recordkeeping requirements
 - (i) The owners and operators, and the designated representative, of each CSAPR NO $_{\rm X}$ Annual source and each CSAPR NO $_{\rm X}$ Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.431 (initial monitoring system certification and recertification procedures), § 97.432 (monitoring system out-of-control periods), § 97.433 (notifications concerning monitoring), § 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
 - (ii) The emissions data determined in accordance with 40 CFR §§ 97.430 through 97.435 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR §§ 97.411(a)(2) and (b) and § 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in

accordance with 40 CFR §§ 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_v emissions requirements

- (i) CSAPR NO_x Annual emissions limitation
 - (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR § 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.
 - (2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR § 97.424(d); and
 - (b) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(ii) CSAPR NO_v Annual assurance provisions

(1) If total NO_v emissions during a control period in a given year from all CSAPR \hat{NO}_{x} Annual units at CSAPR \hat{NO}_{y} Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO, Annual allowances available for deduction for such control period under 40 CFR § 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.425(b), of multiplying—

- (a) The quotient of the amount by which the common designated representative's share of such $\mathrm{NO_x}$ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such $\mathrm{NO_x}$ emissions exceeds the respective common designated representative's assurance level; and
- (b) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR § 97.410(a) and the state's variability limit under 40 CFR § 97.410(b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- (iii) Compliance periods

- (1) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.430(b) and for each control period thereafter.
- (2) A CSAPR NO $_{\rm x}$ Annual unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.430(b) and for each control period thereafter.
- (iv) Vintage of allowances held for compliance
 - (1) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (2) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.
- (vi) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (1) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart AAAAA, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

D. FOP revision requirements

(i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.

(ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (1) The certificate of representation under 40 CFR § 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.416 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.
- (ii) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR § 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

(i) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.

(ii) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

- (i) No provision of the CSAPR NO $_{\rm x}$ Annual Trading Program or exemption under 40 CFR § 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO $_{\rm x}$ Annual source or CSAPR NO $_{\rm x}$ Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.
- 19. CSAPR SO₂ Group 2 Trading Program Requirements (40 CFR § 97.706)
 - A. Designated representative requirements
 - (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.713 through 97.718.
 - B. Emissions monitoring, reporting, and recordkeeping requirements
 - (i) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 2 source and each CSAPR SO₂ Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.730 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.731 (initial monitoring system certification and recertification procedures), § 97.732 (monitoring system out-of-control periods), §97.733 (notifications concerning monitoring), §97.734 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.735 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
 - (ii) The emissions data determined in accordance with 40 CFR § 97.730 through § 97.735 and any other credible evidence shall be used to calculate allocations of CSAPR SO₂ Group 2 allowances under 40 CFR §§ 97.711(a)(2) and (b) and § 97.712 and to determine compliance with the CSAPR SO₂ Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.730 through 97.735 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
 - C. SO, emissions requirements
 - (i) CSAPR SO₂ Group 2 emissions limitation

- (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 2 source and each CSAPR SO₂ Group 2 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 2 allowances available for deduction for such control period under 40 CFR § 97.724(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 2 units at the source.
- (2) If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 2 units at a CSAPR SO₂ Group 2 source are in excess of the CSAPR SO₂ Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR SO₂ Group 2 unit at the source shall hold the CSAPR SO₂ Group 2 allowances required for deduction under 40 CFR § 97.724(d); and
 - (b) The owners and operators of the source and each CSAPR SO₂ Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart DDDDD and the Clean Air Act.
- (ii) CSAPR SO₂ Group 2 assurance provisions
 - If total SO₂ emissions during a control period in a given year from (1) all CSAPR SO₂ Group 2 units at CSAPR SO₂ Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 2 allowances available for deduction for such control period under 40 CFR § 97.725(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.725(b), of multiplying—
 - (a) The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and

- (b) The amount by which total SO₂ emissions from all CSAPR SO₂ Group 2 units at CSAPR SO₂ Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR SO₂ Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total SO₂ emissions from all CSAPR SO₂ Group 2 units at CSAPR SO₂ Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 2 trading budget under 40 CFR § 97.710(a) and the state's variability limit under 40 CFR § 97.710(b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart DDDDD or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 2 units at CSAPR SO₂ Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 2 units at CSAPR SO₂ Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR SO₂ Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR SO₂ Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart DDDDD and the Clean Air Act.

(iii) Compliance periods

- (1) A CSAPR SO₂ Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.730(b) and for each control period thereafter.
- (2) A CSAPR SO₂ Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's

monitor certification requirements under 40 CFR § 97.730(b) and for each control period thereafter.

- (iv) Vintage of allowances held for compliance
 - (1) A CSAPR SO₂ Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR SO₂ Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (2) A CSAPR SO₂ Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR SO₂ Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR SO₂ Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart DDDDD.
- (vi) Limited authorization. A CSAPR SO₂ Group 2 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (1) Such authorization shall only be used in accordance with the CSAPR SO₂ Group 2 Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart DDDDD, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR SO₂ Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 2 allowances in accordance with 40 CFR Part 97, Subpart DDDDD.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.730 through 97.735, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this

FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 2 source and each CSAPR SO₂ Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (1) The certificate of representation under 40 CFR § 97.716 for the designated representative for the source and each CSAPR SO₂ Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.716 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart DDDDD.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 2 Trading Program.
- (ii) The designated representative of a CSAPR SO₂ Group 2 source and each CSAPR SO₂ Group 2 unit at the source shall make all submissions required under the CSAPR SO₂ Group 2 Trading Program, except as provided in 40 CFR § 97.718. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

- (i) Any provision of the CSAPR SO₂ Group 2 Trading Program that applies to a CSAPR SO₂ Group 2 source or the designated representative of a CSAPR SO₂ Group 2 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 2 units at the source.
- (ii) Any provision of the CSAPR SO₂ Group 2 Trading Program that applies to a CSAPR SO₂ Group 2 unit or the designated representative of a CSAPR SO₂ Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

(i) No provision of the CSAPR SO₂ Group 2 Trading Program or exemption under 40 CFR § 97.705 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂

Group 2 source or CSAPR SO₂ Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

- 20. CSAPR NO_v Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)
 - A. Designated representative requirements
 - (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.
 - B. Emissions monitoring, reporting, and recordkeeping requirements
 - (i) The owners and operators, and the designated representative, of each CSAPR NO $_{\rm x}$ Ozone Season Group 2 source and each CSAPR NO $_{\rm x}$ Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), §97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
 - (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR §§ 97.811 (a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
 - C. NO_v emissions requirements
 - (i) CSAPR NO_x Ozone Season Group 2 emissions limitation
 - (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824 (a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.

- (2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824 (d); and
 - (b) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (ii) CSAPR NO_x Ozone Season Group 2 assurance provisions
 - (1) If total NO_v emissions during a control period in a given year from all CSAPR NO, Ozone Season Group 2 units at CSAPR NO, Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO. Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825 (a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825 (b), of multiplying—
 - (a) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (b) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.

- (2) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO $_{\rm x}$ emissions from all CSAPR NO $_{\rm x}$ Ozone Season Group 2 units at CSAPR NO $_{\rm x}$ Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO $_{\rm x}$ emissions exceed the sum, for such control period, of the state NO $_{\rm x}$ Ozone Season Group 2 trading budget under 40 CFR § 97.810 (a) and the state's variability limit under 40 CFR § 97.810 (b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(iii) Compliance periods

- (1) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.
- (2) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.
- (iv) Vintage of allowances held for compliance

- (1) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
- (2) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (vi) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (1) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.
- E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO_{x} Ozone Season Group 2 source and each CSAPR NO_{x} Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- (ii) The designated representative of a CSAPR NO $_{\rm x}$ Ozone Season Group 2 source and each CSAPR NO $_{\rm x}$ Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO $_{\rm x}$ Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

- (i) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (ii) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

H. No provision of the CSAPR NO $_{\rm x}$ Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO $_{\rm x}$ Ozone Season Group 2 source or CSAPR NO $_{\rm x}$ Ozone Season Group 2 unit from

compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

Cross-State Air Pollution Rule (CSAPR) Trading Program Unit Exemptions

21. As reference only information, the following units: VIC3, VIC4, VIC5 and VIC6 (identified as units 5, 6, 7, 8 in the EPA Retired Unit Exemption form) have received a CSAPR retired unit exemption under 40 CFR Part 97 (CSAPR $_{\rm x}$ and $_{\rm x}$ Trading Programs), and are not subject to CSAPR Requirements.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary	34		
•			
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Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
COOLTOW5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EMGEN5	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EMGEN6	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EMGEN7B	SRIC ENGINES	N/A	60IIII-1	40 CFR Part 60, Subpart	No changing attributes.
EMGEN7B	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
OWS1	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5132-01	30 TAC Chapter 115, Water Separation	No changing attributes.
VIC10	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
VIC10	STATIONARY TURBINES	N/A	60KKKK-02	40 CFR Part 60, Subpart KKKK	No changing attributes.
VIC7	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
VIC7	STATIONARY TURBINES	N/A	60KKKK-01	40 CFR Part 60, Subpart KKKK	No changing attributes.
VIC-LOAD	LOADING/UNLOADING OPERATIONS	N/A	R5212-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
COOLTOW5	EP	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]S 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EMGEN5	EU	63ZZZZ- 01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(d) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
EMGEN6	EU	63ZZZZ- 01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	\$ 63.6625(i) \$ 63.6655(a) \$ 63.6655(a)(1) \$ 63.6655(d) \$ 63.6655(e) \$ 63.6655(f) \$ 63.6660(a) \$ 63.6660(b) \$ 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
EMGEN7B	EU	60IIII-1	СО	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206	Owners and operators of emergency stationary CI ICE, that are not fire	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
EMGEN7B	EU	60Ш-1	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMGEN7B	EU	60IIII-1	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in \$60.4202(a)(1)-(2), (b)(2) and \$89.113(a)(1)-(3) and \$1039.105(b)(1)-(3).			
EMGEN7B	EU	60Ш-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMGEN7B	EU	63ZZZZ- 01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
OWS1	EU	R5132-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(b)(3)	Any separator which separates materials having a true vapor pressure < 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(b).	[G]§ 115.135(b) § 115.136(b)(1) § 115.136(b)(3) § 115.136(b)(4)	§ 115.136(b)(1) § 115.136(b)(3) § 115.136(b)(4)	None
VIC10	ЕР	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]S 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
VIC10	EU	60KKKK- 02	NO _x	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)- Table 1 § 60.4320(a) § 60.4320(b) § 60.4325	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet	§ 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345	the nitrogen oxides emission standard of 15 ppm at 15 percent $\rm O_2$.	\$ 60.4350(c) \$ 60.4350(d) \$ 60.4350(e) \$ 60.4350(f) \$ 60.4350(h) [G]§ 60.4400(a) \$ 60.4400(b)(1) \$ 60.4400(b)(2) \$ 60.4400(b)(2) \$ 60.4400(b)(5) \$ 60.4400(b)(6) [G]§ 60.4405		§ 60.4395
VIC10	EU	60KKKK- 02	SO ₂	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(b)	§ 60.4375(a)
VIC7	EP	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
VIC7	EU	60KKKK-	NO_v	40 CFR Part 60,	§ 60.4320(a)-	New, modified, or	§ 60.4333(b)(1)	[G]§ 60.4345	[G]§ 60.4345

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		01		Subpart KKKK	Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) [G]§ 60.4345	reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 54 ng/J of useful output (0.43 lb/MWh).	\$ 60.4335(b)(1) \$ 60.4335(b)(2) \$ 60.4335(b)(3) [G]§ 60.4345 \$ 60.4350(a) \$ 60.4350(c) \$ 60.4350(d) \$ 60.4350(e) \$ 60.4350(f) \$ 60.4350(f) \$ 60.4350(f)(2) \$ 60.4350(h) [G]§ 60.4400(a) \$ 60.4400(b)(1) \$ 60.4400(b)(2) \$ 60.4400(b)(4) \$ 60.4400(b)(5) \$ 60.4400(b)(6) [G]§ 60.4405	§ 60.4350(b)	§ 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
VIC7	EU	60KKKK- 01	SO ₂	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(b)	§ 60.4375(a)
VIC-LOAD	EU	R5212-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B)	Vapor pressure (at land- based operations). All land-based loading and	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.214(b)(1)(D)(i)	unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.215 § 115.215(4)		

	Additional Manita	ring Doguiromonto				
Additional Monitoring Requirements Periodic Monitoring Summary43						
Periodic Monitoring Summa	ary			43		

Periodic Monitoring Summary

Unit/Group/Process Information						
ID No.: COOLTOW5						
Control Device ID No.: N/A Control Device Type: N/A						
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1					
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)					
Monitoring Information						
Indicator: Visible Emissions						
Minimum Frequency: Once per week						
Averaging Period: n/a						

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

Deviation Limit: Observation of visible emissions or opacity greater than 15%

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

Periodic Monitoring Summary

Unit/Group/Process Information							
ID No.: VIC10							
Control Device ID No.: N/A Control Device Type: N/A							
Applicable Regulatory Requirement							
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1						
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)						
Monitoring Information							
Indicator: Visible Emissions							
Minimum Frequency: Once per week							
Averaging Period: n/a							

Deviation Limit: Observation of visible emissions or opacity reading greater than 15 %

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

Periodic Monitoring Summary

Unit/Group/Process Information							
ID No.: VIC7							
Control Device ID No.: N/A Control Device Type: N/A							
Applicable Regulatory Requirement							
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1						
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)						
Monitoring Information							
Indicator: Visible Emissions	Indicator: Visible Emissions						
Minimum Frequency: Once per week							
1							

Averaging Period: n/a

Deviation Limit: Observation of visible emissions or opacity reading greater than 15%

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Uni	t/Group/Process	Regulation	Basis of Determination	
ID No.	Group/Inclusive Units			
DEGR1	N/A	30 TAC Chapter 115, Degreasing Processes	Remote reservoir cold solvent cleaner which uses solvent with TVP < 0.6 psia at 100'F, drain area < 16 square inches, and waste solvent properly disposed of in enclosed containers.	
EMGEN5	N/A	30 TAC Chapter 115, Vent Gas Controls	Not being used as a control device	
EMGEN5	N/A	40 CFR Part 60, Subpart IIII Not constructed, modified, or reconstructed after July 11, 200		
EMGEN6	N/A	30 TAC Chapter 115, Vent Gas Controls	Not being used as a control device	
EMGEN6	N/A	40 CFR Part 60, Subpart IIII	Not constructed, modified, or reconstructed after July 11, 2005	
TKEMGEN5	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons	
TKEMGEN5	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)	
TKEMGEN6	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons	
TKEMGEN6	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)	
TKEMGEN7	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons	
TKEMGEN7	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)	
TKUNIT5	N/A	30 TAC Chapter 115, Storage of VOCs TVP < 1.0 psia at actual storage condition		
TKUNIT5	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.	

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TKUNIT5	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNIT5	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
TKUNT4CL	N/A	30 TAC Chapter 115, Storage of VOCs	TVP < 1.0 psia at actual storage conditions
TKUNT4CL	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.
TKUNT4CL	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNT4CL	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
TKUNT4DTY	N/A	30 TAC Chapter 115, Storage of VOCs	TVP < 1.0 psia at actual storage conditions
TKUNT4DTY	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.
TKUNT4DTY	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNT4DTY	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
USEDOIL	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons
USEDOIL	N/A	40 CFR Part 60, Subpart Kb Storage capacity less than 75 i gallons)	
VIC10	N/A	30 TAC Chapter 117, Subchapter E, Division 1	Combined Cycle Unit placed into service after December 31, 1995

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
VIC7	N/A	1	Turbine placed into service after 12/31/1995.

New Source Review Authorization References 51 New Source Review Authorization References by Emission Unit 52

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits						
PSD Permit No.: PSDTX1348	Issuance Date: 02/18/2015					
PSD Permit No.: PSD-TX-1348-GHG	Issuance Date: 10/08/2014					
Title 30 TAC Chapter 116 Permits, Special Permits By Rule, PSD Permits, or NA Perm	Permits, and Other Authorizations (Other Than its) for the Application Area.					
Authorization No.: 108258	Issuance Date: 02/18/2015					
Authorization No.: 80878	Issuance Date: 07/08/2016					
Permits By Rule (30 TAC Chapter 106) for	the Application Area					
Number: 106.227	Version No./Date: 09/04/2000					
Number: 106.263	Version No./Date: 11/01/2001					
Number: 106.265	Version No./Date: 09/04/2000					
Number: 106.371	Version No./Date: 09/04/2000					
Number: 106.412	Version No./Date: 09/04/2000					
Number: 106.454	Version No./Date: 11/01/2001					
Number: 106.472	Version No./Date: 09/04/2000					
Number: 106.511	Version No./Date: 09/04/2000					
Number: 106.532	Version No./Date: 09/04/2000					

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
COOLTOW5	COOLING TOWER 5	108258, PSDTX1348
DEGR1	DEGREASER	106.454/11/01/2001
EMGEN5	EMERGENCY GENERATOR 5	106.511/09/04/2000
EMGEN6	EMERGENCY GENERATOR 6	106.511/09/04/2000
EMGEN7B	EMERGENCY GENERATOR 7B	106.511/09/04/2000
OWS1	OIL/WATER SEPARATOR	106.532/09/04/2000
TKEMGEN5	DIESEL TANK	106.472/09/04/2000
TKEMGEN6	DIESEL TANK	106.472/09/04/2000
TKEMGEN7	DIESEL TANK	106.472/09/04/2000
TKUNIT5	UNIT 5 TURBINE OIL TANK	106.472/09/04/2000
TKUNT4CL	UNIT 4 CLEAN OIL TANK	106.472/09/04/2000
TKUNT4DTY	UNIT 4 DIRTY OIL TANK	106.472/09/04/2000
USEDOIL	USED OIL TANK	106.472/09/04/2000
VIC10	UNIT 10 COMBINED CYCLE UNIT	108258, PSDTX1348, PSD-TX-1348-GHG
VIC10	UNIT 10 COMBINED CYCLE UNIT STACK	108258, PSDTX1348, PSD-TX-1348-GHG
VIC7	UNIT 7 COMBINED CYCLE UNIT	80878
VIC7	UNIT 7 COMBINED CYCLE UNIT STACK	80878
VIC-LOAD	SITE WIDE UNLOADING	106.472/09/04/2000

	Appendix A	
Acronym List		54

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
	alternate means of control
	Acid Rain Program
ΔSTM	American Society of Testing and Materials
	Beaumont/Port Arthur (nonattainment area)
	comphance Assurance Mointoring control device
	continuous opacity monitoring system
	closed-vent system
	Dallas/Fort Worth (nonattainment area)
· · · · · · · · · · · · · · · · · · ·	Designated Representative
	El Paso (nonattainment area)
	emission point
FPΔ	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
	federal operating permit
	grandfathered
	grains per 100 standard cubic feet
	hazardous air pollutant
	Houston/Galveston/Brazoria (nonattainment area)
	hydrogen sulfide
	identification number
	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
	monitoring, recordkeeping, reporting, and testing
	nonattainment
	not applicable
NADB	National Allowance Data Base
NO	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
	Office of Regulatory Information Systems
Pb	lead
	Permit By Rule
	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
	sulfur dioxide
	Texas Commission on Environmental Quality
	total suspended particulate
	true vapor pressure
	United States Code
VOC	volatile organic compound

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Major NSR Summary Table		 56

Major NSR Summary Table

Permit Number: 10	ary Table 08258 and PSI	DTX1348 Issua	nce Date	: 2/18/2	2015		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	EIIIISSIOII Dates		Monitoring and Testing Requirements	Recordkeepi ng Requirement s	Reporting Requirement s
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
VIC10	Unit 10	NO _.	30.8		3,12, 13, 14, 15	3, 13, 14, 15,	3, 13, 14, 23
	Combined Cycle (GE 7FA) or equivalent	NOx (startup/shutdo wn)	301.5	149.3		21, 22	
	equivalent	СО	21.4		12, 13, 14, 15	13, 14, 15,	13, 14, 23
		CO (startup/shutdo wn)	1909.5	358.0		21, 22	
		SO ₂	33.5	12.6	3, 8, 12, 13, 15	3, 13, 15, 21, 22	3, 13, 23
		VOC	12.3		12, 13, 15	13, 15, 21,	13, 23
		VOC (startup/shutdo wn)	349.5	39.0		22	
		PM	22.9	57.7	6, 12, 13, 15		13, 23
		PM ₁₀	22.9	57.7		22	
		PM ₂ =	22.9	57.7			
		H ₂ SO ₄	5.2	2.0	15	15	23
		NH ₂	22.8		12, 13, 15, 16	13, 15, 21	13, 23
		NH ₃ (startup/shutdo wn)	34.0	85.0			
		НСНО	0.6	2.0	3, 15	3, 15	3, 23
VIC10-LOV		PM	0.003	0.01			
	Vent	PM	0.003	0.01			
		PM ₂₅	0.003	0.01			
COOLTOW5	Cooling	PM	5.28	20.25	18	7, 18, 22	18
	Tower (5)	PM	1.51	6.54			
		PM _{ae}	<0.01	0.04			
VIC10-FUG-NGAS (6)	Unit 10 Natural Gas Fugitive Emissions	VOC	0.1	0.4			
VIC10-FUG-SCR (6)	Unit 10 SCR Piping	NH ₃	0.1	0.1	10	22	

Permit Number: 108258 and PSDTX1348 Issuance Date: 2/18/2015							
		Air Contaminant Name (3)		n	Monnoring and	Recordkeepi ng Requirement s	Reporting Requirement s
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Fugitive Emissions						

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5} PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO^{2.3} - carbon monoxide

NH - ammonia HCOH - formaldehyde H₂SO₂ - sulfuric acid

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Compliance with the emission rates for the cooling tower shall be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of VIC10 gas turbine.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Major PSD-GHG Summary Table

Permit Num	ber: PSD-TX-1	348-GHG I	ssuance Date:	10/08/2014			
Emission Point No.	Source Name	Air Contamin	Emission Rates(1)		Monitoring and Testing Requirements	Recordkeepi ng Requirement s	Reporting Requiremen ts
		ant Name	TPY	TPY CO2e (2),(3)	Spec. Cond.	Spec. Cond.	Spec. Cond.
VIC10	Unit 10	CO2	1,070,879.0		IV.A.1, IV.A.2,	IV.A.3, IV.A.4	
	Combined Cycle (GE	CH4	23		IV.A.3 V.A	V.B, V.C, V.G	VII.B, VII.C, VII.D
7FA) or equivalent (4)		N2O	2	1,072,053	VII.A, VII.D, VII.E, VII.F, VII.G, VII.H		
VIC10-FUG- NGAS	Unit 10 Natural Gas Fugitive Emissions	СН4	No Emission Limit Established(5)	Limit	IV.B.1	IV.B.4 V.B, V.C, V.G	V.C
VIC10-INS- SF6	Sf6 Insulated Electrical Equipment	SF6	No Emission Limit Established(6) No Emission Limit Established(6)		IV.B.3	IV.B.4 V.B, V.C, V.G	V.C
Totals (7)		CO2	1,070,879				
		CH4	41	1 072 400			
		N2O	2	1,072,498			
		SF6	0.000056				

- 1. Compliance with the annual emission limits (tons per year) is based on a 12-month rolling average.
- The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations and include MSS activities. This total is rounded off for estimation purposes to two significant figures.
- Global Warming Potentials (GWP): CO₂ =1, CH₄ = 25, N₂O = 298, SF₆ = 22,800 Includes emissions during all operational modes, including purging venting associated with the CT and DB shutdown and maintenance events. CH is vented via an automatic double block and bleed at the CTG during each shutdown event. Additionally, CH₁ is vented from the duct burner system each time the ducts are shutdown. Annual emissions for these activities are included in the annual CO e limit for VIC10.
- 5. Fugitive process emissions from EPN VIC10-FUG-NGAS are estimated to be 17.8 TPY CH, and 445 TPY CO₂e. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.
- SF_c emissions from EPA VIC10-INS-SF6 are estimated to be 0.000056 tpy SF_c and 1.28 tpy CO_ce. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.
- Totals are given for informational purposes only and do not constitute emission limits.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



Authorizing the Construction and Operation of Victoria Power Station

Located at Victoria, Victoria County, Texas Latitude 28° 47′ 14″ Longitude 97° 0′ 36″



Permits: 108258 and	l PSDTX1348
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Revision Date : February 18, 2015

Expiration Date: <u>December 1, 2024</u>

For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

Revised (10/12)

- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Revised (10/12)

Permit Numbers 108258 and PSDTX1348

Emission Rates and Permit Representations

- 1. This permit authorizes only those sources of emissions listed in the attached tables entitled "Emission Sources Maximum Allowable Emission Rates" (MAERT) and those sources are limited to the emission limits and other conditions specified on the attached MAERT. Planned startup and shutdown emissions from Emission Point Number (EPN) VIC10 have been evaluated and are authorized by this permit.
- 2. Emission limits are based on representations in the permit application dated February 14, 2013 as subsequently updated.

Federal Applicability

3. The sources identified in this condition are subject to and shall comply with applicable requirements of Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Standards of Performance for New Stationary Sources (NSPS) as follows:

Source	Emission Point Number (EPN)	Subpart	Standards of Performance for:
Combustion Turbine	VIC10	KKKK	Stationary Gas Turbines
and Duct Burner	VICIO	A	General Conditions

The sources identified in this condition are subject to and shall comply with applicable requirements of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (NESHAPS) as follows:

Source	Emission Point Number (EPN)	Subpart	Standards of Performance for:
Combustion Turbine	VIC10	YYYY	Stationary Gas Turbines
and Duct Burner	VICIO	A	General Conditions

Operating Limitations, Performance Standards, and Fuel Specifications

4. This permit authorizes one natural gas-fired combustion turbine (GT), identified as EPN VIC10, to operate in combined cycle with a heat recovery steam generator (HRSG) and a steam turbine. The GT shaft drives an electric generator and the HRSG supplies steam to a steam turbine which drives an additional electric generator. The GT may employ evaporative cooling for power enhancement. The

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HRSG is equipped with natural gas-fired duct burners which are rated at and limited to a maximum heat input of 483 million British thermal units per hour (MMBtu/hr), based on the high heating value of the fuel.

- A. This permit authorizes the construction and operation of one General Electric Model GE 7FA.04 CT or equivalent unit. If a different vendor is selected, TCEQ will be notified prior to the start of construction. The selected unit will meet the emission rate limits outlined in the MAERT and will comply with all Special Conditions of this permit.
- B. The GT is authorized to operate in normal operation, at any load and ambient condition that will comply with the emission concentration limitations in Special Condition No. 5A and the normal operation emission rates in the MAERT.
- 5. A. The concentration of emissions from the GT/HRSG with duct burner while operating in normal operation, as defined in Special Condition No. 4B, shall not exceed the following limits expressed in parts per million by volume dry (ppmvd), at 15% oxygen (O₂).

Concentration Limits for GTs/HRSGs in Normal Operation

Pollutant	Concentration (ppmvd)	Averaging time
Nitrogen oxides (NO _x)	2.0	24-hour rolling
Ammonia (NH ₃)	7.0	average ¹
Carbon monoxide (CO)	4.0	3-hour rolling average
Volatile organic compounds (VOC) ²	4.0	3-hour average

¹The 24-hour compliance averaging time for NH₃ applies if a continuous monitoring method is selected under Special Condition No. 16A. A 1-hour average applies if periodic testing is selected under Special Condition No. 16B.

- ²Defined as total hydrocarbons minus methane and ethane, calculated as methane.
- B. The concentration limits in 5A of this Special Condition do not apply to the GT/HRSG while the unit is starting up or shutting down described in Special Condition No. 20A and 20B.
- C. The emissions from the GT/HRSG with duct burner while operating during startup and shutdown, as described in Special Condition Nos. 20A and 20B, shall not exceed the pound-per-hour emission limits for startup/shutdown operations specified in the MAERT.
- 6. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from the stack. During MSS activities, the opacity shall

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not exceed 15 percent. Compliance shall be demonstrated by observations performed and recorded quarterly. If the opacity exceeds 5 percent during normal operations or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. Each determination shall be made by first observing for visible emissions while the emission source is in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from the emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition.

- 7. The following requirements apply to the cooling tower (EPN COOLTW5):
 - A. The maximum water conductivity in the cooling water shall not exceed 8,000 microsiemens per centimeter (μ S/cm). If a continuous monitoring system (such as a process conductivity monitor) is used to measure TDS, this limit may be applied on a rolling 24-hour basis.
 - B. Drift from the cooling towers will be minimized by using drift eliminators that will reduce drift to 0.001 percent of the circulating water. The drift eliminators and other cooling tower mechanical controls must be operated and maintained in good working order, consistent with manufacturers' requirements for proper operation. Maintenance and repairs of the system shall be documented when they occur.

The cooling tower will be subject to the requirements established in 7.A and 7.B upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the cooling tower will continue to operate as authorized by Texas Administrative Code (TAC) §106.371. (02/15)

- 8. Fuel usage of the permitted facilities is subject to the following.
 - A. The GT and duct burner must use natural gas containing no more than 5.0 grain (gr) total sulfur on an hourly basis and 0.5 gr on an annual basis of total sulfur per 100 dry standard cubic feet.
 - B. Firing of any other fuel will require authorization from the TCEQ Air Permits Division.
 - C. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the GT and duct burner or shall

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allow an air pollution control agency representative to obtain a sample for analysis.

- 9. The aqueous NH₃ storage and delivery system is subject to the following requirements.
 - A. The permit holder shall maintain loss prevention and protection measures for the storage system. The storage tank area must be marked and protected so as to protect the area from accidents that could cause a rupture.
 - B. Stored aqueous NH₃ must have a concentration of less than 20% NH₃ by weight.
 - C. All operating practices and procedures relating to the handling and storage of NH₃ shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
- 10. Audio, visual, and olfactory (AVO) checks for NH₃ leaks within the operating area shall be made once a day. Following the detection of a leak, plant personnel shall take one or more of the following actions as soon as practicable:
 - A. locate and isolate the leak, if necessary;
 - B. commence repair or replacement of the leaking component; and
 - C. use a leak collection/containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

Initial Determination of Compliance

- 11. Sampling ports and platforms shall be incorporated into the design of the exhaust stack identified as EPN VIC10 according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
- 12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPN VIC10 and to determine initial compliance with all emission limits established for the GT. Unless otherwise specified in this Special Condition No. 12, the sampling and testing shall be conducted in accordance with the methods and procedures specified in Special Condition No. 13. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at the holder's expense. The TCEQ

Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

- A. Air contaminants and diluents from the turbine to be sampled and analyzed include (but are not limited to) NO_x, CO, VOC, sulfur dioxide (SO₂), NH₃, PM₁₀, opacity, and O₂.
- B. The turbine shall be tested with the duct burner at maximum firing rate while the turbine is operating as close to 100% of full load as possible.
- C. Fuel sampling using the methods and procedures of 40 CFR 60.4415(a) may be conducted in lieu of stack sampling for SO_2 . If fuel sampling is used, compliance with SO_2 limits shall be based on 100% conversion of the sulfur in the fuel to SO_2 .
- D. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Air Permits Division in Austin.
- E. Sampling as required by this condition shall occur within 60 days after achieving the maximum fuel firing rate at which the turbine and duct burner will be operated, but no later than 180 days after initial startup of the unit. Additional sampling shall occur as may be required by the TCEQ or EPA.
- 13. A. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual, and EPA Test Methods in 40 CFR Part 60, Appendix A, 40 CFR 51, Appendix M, and EPA Conditional Test Methods as follows:
 - (1) Appendix A, Test Methods 1 through 4, as appropriate, for exhaust flow, diluent, and moisture concentration;
 - (2) Appendix A, Test Method 6, 6a, 6c or 8 for the concentration of SO₂;
 - (3) Appendix A, Test Methods 7E or 20, or equivalent methods for the concentrations of NO_x and O_2 .
 - (4) Appendix A, Test Method 9 for opacity (consisting of 30 six-minute readings as provided in 40 CFR §60.11[b]);
 - (5) Appendix A, Test Method 10 for the concentration of CO;
 - (6) Appendix A, Test Method 19 for applicable calculation methods;

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- (7) Appendix A, Test Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as methane);
- (8) EPA Conditional Test Method 27 (CTM-027) for NH₃.
- (9) Appendix M, Test Methods 201A and 202, or Appendix A, Test Method 5, modified to include back half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM₁₀);
- (10) Any variations from those procedures must be approved by the Executive Director of the TCEQ or his designated representative prior to sampling.
- B. The TCEQ Regional Office shall be given notice as soon as testing is scheduled but not less than 30 days prior to sampling to schedule a pretest meeting.
 - (1) The notice shall include:
 - (a) Date for pretest meeting.
 - (b) Date sampling will occur.
 - (c) Name of firm conducting sampling.
 - (d) Type of sampling equipment to be used.
 - (e) Method or procedure to be used in sampling, including methods to demonstrate compliance with emission standards found in 40 CFR Part 60, Subpart KKKK.
 - (f) Procedure used to determine turbine loads during and after the sampling period.
 - (2) The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.
 - (3) Prior to the pretest meeting, a written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.
- C. Copies of the final sampling report shall be forwarded to the TCEQ and EPA within 60 days after sampling is completed. Sampling reports shall comply with Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the EPA Region 6 Office, Dallas. One copy to the TCEQ Corpus Christi Regional Office.

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One copy to the TCEQ Austin Office.

Continuous Determination of Compliance

- 14. The holder of this permit shall install, calibrate, maintain, and operate a continuous emissions monitoring systems (CEMS) to measure and record the concentrations of NO_x, CO, and diluent (O₂ or carbon dioxide [CO₂]) from the GT/HRSG exhaust stack, EPN VIC10.
 - A. The NO_x and diluent CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendices A and B. The requirements of 40 CFR Part 75, Appendices A and B are deemed an acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60.
 - В. The CO CEMs shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 60, Appendix B, Performance Specification No. 4. The CEMS shall meet the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, except that cylinder gas audits (CGA) conducted in all four quarters may be used in lieu of the annual relative accuracy test audit. Quarterly CGAs shall be conducted at least 60 days apart. A CGA is not required in any quarter in which the GT operates less than 168 hours. Relative accuracy exceedances (as specified in 40 CFR 60, Appendix F), CGA exceedances of ±15% accuracy, and any CO CEMS downtime shall be reported to the TCEQ Regional Director in the semiannual report described in Special Condition 27, and necessary corrective action shall be taken. Supplemental stack sampling may be required at the discretion of the TCEQ Regional Director.
 - C. The CEMS shall undergo a calibration error test daily when the unit is operating at normal, stable conditions ("on-line"), as required by 40 CFR Part 75. Daily calibrations may also be performed while the unit is not operating (i.e., "off-line"). Corrective action will be taken when the unit fails to meet the Data Validation requirements of 40 CFR Part 75, Appendix B, Section 2.14.
 - D. For full operating hours, the monitoring data must be reduced to hourly average values at least once every day, using a minimum of four, and normally 60, approximately equally-spaced data points from each one-hour period. For hours in which calibration checks, zero and span adjustments, system breakdowns, or repairs occur, at least two valid data points separated by a

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- minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) will be sufficient to quality-assure the hour.
- E. The valid hourly average data from the CEMS shall be used to determine compliance with the concentration limits of Special Condition No. 5A and in conjunction with the hourly average natural gas fuel consumption data required by Special Condition No. 15, the hourly emission rate limits of the MAERT. Pounds per hour data from the GT/HRSG stack must be summed monthly to tons per year and used to determine compliance with the annual emission limits of the MAERT.
- 15. The holder of this permit shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the average hourly natural gas consumption of the GT/HRSG with duct burner combination. The fuel flow meter shall be accurate to ±2.0 percent of the units' maximum flow. The permit holder shall comply with the applicable initial certification and ongoing quality assurance requirements of 40 CFR Part 75, Appendix D for the GT/duct burner combination.
- 16. The holder of this permit shall continuously monitor or periodically measure NH₃ emissions from EPN VIC10 when the respective selective catalytic reduction (SCR) system is in operation. The emission measurements shall be used to demonstrate compliance with the NH₃ limits of Special Condition No. 5A and the MAERT. Use of one of the following methods [A(1), A(2), A(3), B, or C] is required.
 - A. Continuously monitor or continuously calculate NH₃. Install, calibrate, maintain, and operate a CEMS to measure and record NH₃ directly or calculate NH₃ through the use of a secondary NO_x measurement. The continuously measured or continuously calculated NH₃ concentrations shall be corrected in accordance with Special Condition No. 5A. Monitor downtime shall not exceed 5 percent of the time that the GT was operated over the previous 12-month rolling period. Downtime consists of activities involving calibration, unanticipated power failure, unanticipated equipment malfunction, unplanned maintenance and planned maintenance. The continuous options are as follows.
 - (1) Use a CEMS to directly measure and record the concentration of NH₃. If there are no applicable NH₃ CEMS performance specifications in 40 CFR Part 60, contact the TCEQ Air Permits Division in Austin for requirements to be met.
 - (2) Use a second NO_x CEMS probe located between the duct burner and the SCR unit, upstream of the stack NO_x CEMS. In association with the SCR efficiency and NH₃ injection rate, calculate the NH₃ emissions. This

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- condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit.
- (3) Use a dual stream system of NO_x CEMS at the exit of the SCR. Route one of the exhaust streams, in an unconverted state, to one NO_x CEMS and route the other exhaust stream through a NH_3 converter to convert NH_3 to NO_x and then to the second NO_x CEMS. The NH_3 emission concentration is the difference between the converted and unconverted NO_x CEMS readings.
- B. Any other method used for measuring NH₃ slip shall require prior approval from the TCEQ Corpus Christi Regional Office.
- 17. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility unless written permission is obtained from the TCEQ Corpus Christi Regional Office which allows for a longer repair or replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
- 18. The holder of this permit shall demonstrate compliance with the TDS concentration limit in Special Condition No. 7A and the hourly and annual PM emission limits for the cooling tower in the MAERT as indicated in 18.A through 18.E. These requirements will be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the cooling tower will continue to operate as authorized by 30 TAC §106.371. (02/15)
 - A. Use a conductivity meter to measure and record the conductivity of the cooling water at a fixed monitoring point in the recirculation loop of the cooling tower at least weekly.
 - B. Calculate TDS using a conductivity-to-TDS conversion factor. The conversion factor shall be established and maintained as follows.
 - (1) Use a conservative default conversion factor of 0.67 parts per million by weight (ppmw) per μ S/cm initially until a site-specific measured value is determined.
 - (2) Measure conductivity and TDS in the cooling water in each of the three calendar months following the start of commercial operation of the turbine. Sample and analyze in accordance with "Standard Methods for the Examination of Water and Wastewater," Method 2510 for conductivity, and Method 2540 for TDS. Calculate the average

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conversion factor and the standard deviation based on the three values. Summarize the results in a report and submit a copy of the report within 30 days after completion of the sampling to the TCEQ Corpus Christi Regional Office.

- (3) After establishing the initial measured conductivity-to-TDS conversion factor, continue measuring conductivity and TDS at least quarterly, using the methods in (2) above to quality assure and maintain or update the conversion factor.
- C. If monitoring indicates an exceedance of the TDS limit of Special Condition No. 7A, conduct an evaluation, take corrective action, and document the results within 24 hours.
- D. Maintain records of the date, time and location of the monitoring, the conductivity, and the TDS, identifying whether the TDS is calculated from the conductivity or directly measured.
- E. Assure ongoing compliance with the cooling tower drift rate specified in Special Condition No. 7B by annual inspection of the cooling tower modules, and repair as necessary, to maintain drift eliminator structural integrity and minimize bypassing of flow around drift eliminators.

Maintenance, Startup, and Shutdown (MSS)

- 19. Within 60 days of the start of operation, the permit holder shall submit a permit by rule registration request to the TCEQ to authorize planned maintenance activities.
- 20. Emissions during GT startup and shutdown activities will be minimized by limiting the duration of operation in planned MSS modes as follows:
 - A. Planned startup of the GT is initiated when the Data Acquisition and Handling System (DAHS) detects a flame signal (or equivalent signal) and ends when the permissives for the emission control system are met (i.e., steady state emissions compliance is achieved). A startup for the combustion turbine is limited to 10 hours (cold startup) per event. At the conclusion of the startup, the permit holder shall comply with the emission concentration limitations in Special Condition No. 5A and the normal operation emission rates in the MAERT. Startups are defined as:
 - i. Cold Startup: is a startup after an extended GT shutdown of greater than 64 hours. A planned cold startup event shall not exceed 10 hours.
 - ii. Warm Startup: is a startup after a GT shutdown of 16 to 64 hours. A planned warm startup event shall not exceed 4 hours.

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- iii. Hot Startup: is a startup after a GT shutdown of less than 16 hours. A planned hot startup event shall not exceed 2.5 hours.
- B. A planned shutdown of the GT begins when the load drops to the point at which steady state emissions compliance can no longer be assured and ends when a flame-off signal is detected. A planned shutdown for the GT is limited to 60 minutes per event.

Recordkeeping Requirements

- 21. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
 - A. A copy of this permit.
 - B. The permit application dated February 2013 and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 14 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
- 22. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
 - A. Records necessary to demonstrate compliance with the applicable of 40 CFR Part 60, Subpart KKKK.
 - B. Records necessary to demonstrate compliance with the applicable of 40 CFR Part 63, Subpart YYYY.
 - C. For pollutants that are monitored by CEMS, hourly records of GT/HRSG emissions and operation to demonstrate compliance with the applicable performance standards of NSPS Subpart KKKK, the concentration limits of Special Condition No. 5, and the hourly and annual emission rates listed in the MAERT, as follows.

- i. Continuous emission monitoring data for NO_x, CO, diluent gases, O₂ or CO₂, and if applicable, NH₃. Data retention at intervals less than one hour is not required. Records should identify the times when emissions data have been excluded from the calculation of average emission rates because of MSS or malfunction along with the justification for excluding data. Records should also identify factors used in calculations that are used to demonstrate compliance with emission limits and performance standards.
- ii. Hourly average GT/HRSG with duct burner combined fuel flow, as specified in Special Condition No. 15, to calculate emissions in lbs/hr.
- D. Records of opacity observations to demonstrate compliance with Special Condition No. 6.
- E. Fuel purchase records, copies of gas supply contracts, test results, or other information to demonstrate compliance with fuel sulfur limits of Special Condition No. 8.
- F. Records of AVO checks for ammonia leaks and maintenance performed to any piping and valves in aqueous NH₃ service to show compliance with Special Condition No. 10. In addition, written records of any accidental releases, spills, or venting of NH₃ and the corrective action taken.
- G. Files of all CEMS quality assurance measures, calibration checks, adjustments and maintenance performed on these systems to demonstrate compliance with Special Condition Nos. 14, 16A, and 17.
- H. Records of cooling tower TDS monitoring as required by Special Condition No. 18A-D and annual inspections of drift eliminators as required by Special Condition No. 18E. These requirements will be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the unit will continue to operate as authorized by 30 TAC §106.371. (02/15)
- I. Records of dates and times of GT startup and shutdown to demonstrate compliance with Special Condition No. 20.

Reporting

23. The holder of this permit shall submit to the TCEQ Corpus Christi Regional Office semiannual reports using formats described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit.

Date: February 18, 2015

Emission Sources - Maximum Allowable Emission Rates

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This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No.	Source Name (2)	Air Contaminant Name	Emission Rates		
(1)	Source Name (2)	(3)	lbs/hour	TPY (4)	
VIC10	Unit 10 Combined Cycle (GE 7FA) or	NO _x	30.8	140.0	
	equivalent	NO _x (startup/shutdown)	301.5	149.3	
		со	21.4	250	
		CO (startup/shutdown)	1909.5	358.0	
		SO ₂	33.5	12.6	
		VOC	12.3	00.0	
		VOC (startup/shutdown)	349.5	39.0	
		PM	22.9	57.7	
		PM ₁₀	22.9	57.7	
		PM _{2.5}	22.9	57.7	
		H ₂ SO ₄	5.2	2.0	
		NH ₃	22.8	85.o	
		NH ₃ (startup/shutdown)	34.0	65.0	
		НСОН	0.6	2.0	
VIC10-LOV	Lube Oil Vent	PM	0.003	0.01	
		PM ₁₀	0.003	0.01	
		PM _{2.5}	0.003	0.01	
COOLTOW5	Cooling Tower (5)	PM	5.28	20.25	
		PM ₁₀	1.51	6.54	
		PM _{2.5}	<0.01	0.04	

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Emission Sources - Maximum Allowable Emission Rates

Emission Point No.	Source Name (2)	Air Contaminant Name	Emission Rates	
(1)	Source Name (2)	(3)	lbs/hour	TPY (4)
VIC10-FUG-NGAS (6)	Unit 10 Natural Gas Fugitive Emissions	voc	0.1	0.4
VIC10-FUG-SCR (6)	Unit 10 SCR Piping Fugitive Emissions	$ m NH_3$	0.1	0.1

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

NH₃ - ammonia HCOH - formaldehyde H₂SO₄ - sulfuric acid

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Compliance with the emissions rates for the cooling tower shall be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Project Number: 227451



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS TX 75202-2733

OCT 0 8 2014

Mr. Gary Clark Asset Manager Victoria WLE, LP 919 Milam Street, Suite 2300 Houston, TX 77002

Dear Mr. Clark:

In accordance with the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), the U.S. Environmental Protection Agency has reviewed your application for a CAA Prevention of Significant Deterioration (PSD) for Greenhouse Gas Emissions permit authorizing the construction of the Victoria Power Station in Victoria, Texas.

The EPA issued and published requests for public comment regarding EPA's proposed action on the above application on August 12, 2014. During the public comment period, EPA received written comments on August 12, 2014 from CAMS eSPARC, LLC on behalf of Victoria WLE, LP. After considering the pertinent Federal statutes and regulations and material relevant to the application contained in our Administrative Record, the EPA hereby issues the enclosed PSD permit for the facility described above. The final permit, Responses to Public Comments, and other key documents relevant to the final PSD permit are also available online at: http://yosemite.epa.gov/r6/Apermit.nsf/AirP.

In accordance with 40 CFR § 124.14(b)(3), this PSD permit becomes effective thirty (30) days from the date of service of notice of this permit decision unless a petition for review is properly and timely filed with the EAB. In the event that a petition for review is filed with the EAB, construction of the facility is not authorized under this PSD permit until resolution of the EAB petition(s). If you have any questions regarding this matter, please contact Mr. Jeff Robinson, Chief, Air Permits Section at (214) 665-6435.

Sincerely,

Wren Stenger

Director

Multimedia Planning and Permitting Division

Enclosures

cc: Ms. Mona Johnson, Regulatory and Compliance Manager, Victoria WLE, L.P.

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT FOR GREENHOUSE GAS EMISSIONS ISSUED PURSUANT TO THE REQUIREMENTS AT 40 CFR § 52.21

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6

PSD PERMIT NUMBER:

PSD-TX-1348-GHG

PERMITTEE:

Victoria WLE, L.P.

FACILITY NAME:

Victoria Power Station

MAILING ADDRESS:

919 Milam Street, Suite 2300

Houston, TX 77002

FACILITY LOCATION:

1205 South Bottom Street

Victoria, TX 77901

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, Part C (42 U.S.C. § 7470, et. Seq.), and the Code of Federal Regulations (CFR) Title 40, Section 52.21, and the Federal Implementation Plan at 40 CFR § 52.2305 (effective May 1, 2011 and published at 76 FR 25178), the U.S. Environmental Protection Agency, Region 6 is issuing a Prevention of Significant Deterioration (PSD) permit to Victoria WLE, L.P. for Greenhouse Gas (GHG) emissions. The Permit authorizes a major modification that adds natural gas combined cycle generating capacity to the existing Victoria Power Station (VPS) plant.

VPS is authorized to expand its existing natural gas fired combined cycle electric generating facility as described herein, in accordance with the permit application (and plans submitted with the permit application), the federal PSD regulations at 40 CFR § 52.21, and other terms and conditions set forth in this PSD permit in conjunction with the corresponding Texas Commission on Environmental Quality (TCEQ) PSD permit No. PSD-TX-1348. Failure to comply with any condition or term set forth in this PSD Permit may result in enforcement action pursuant to Section 113 of the Clean Air Act (CAA). This PSD Permit does not relieve VPS of the responsibility to comply with any other applicable provisions of the CAA (including applicable implementing regulations in 40 CFR Parts 51, 52, 60, 61, 72 through 75, and 98) or other federal and state requirements (including the state PSD program that remains under approval at 40 CFR § 52.2303).

In accordance with 40 CFR §124.15(b), this PSD Permit becomes effective 30 days after the service of notice of this final decision unless review is requested on the permit pursuant to 40 CFR §124.19.

Wren Stenger, Director

Multimedia Planning and Permitting Division

10/8/14/ Date

Victoria WLE, L.P. (PSD-TX-1348-GHG) Prevention of Significant Deterioration Permit For Greenhouse Gas Emissions Permit Conditions

PROJECT DESCRIPTION

Pursuant to the provisions of this permit, Victoria WLE, L.P. (Victoria) will carry out a major modification at the existing Victoria Power Station (VPS) located in Victoria, Victoria County, Texas. The existing VPS is a natural gas-fired combined cycle base load power generating station that currently operates in a 1 by 1 by 1 (1 x 1 x 1) configuration (one combustion turbine, one HRSG and one steam turbine) with a gas turbine (M501F), heat recovery steam generator (HRSG) equipped with duct burners and a steam generator (General Electric D5). The project would add a new gas turbine (GE.7FA.04 or equivalent) and HRSG equipped with duct burners. After these additions, the facility will be able to operate in a natural gas-fired combined cycle generating unit in a 2 by 2 by 1 (2 x 2 x 1) configuration (two combustion turbines, two HRSG and one steam turbine) that utilizes the existing non-modified M501F combustion turbine and HRSG and the existing non-modified steam turbine. The VPS plant is authorized to operate in a 1 x 1 x 1 combined cycle configuration with the new gas turbine and new HRSG, and it retains ability to operate in its original 1 x 1 x 1 combined cycle configuration without an assigned GHG BACT limit. VPS operations covered by the permit will consist of the following sources of GHG emissions:

- Natural Gas-Fired Combined Cycle Combustion Turbine (GE.7FA.04 or equivalent). The
 combustion turbine is equipped with a heat recovery steam generator (HRSG) and duct
 burners, dry low NOx (DLN) combustion system, and selective catalytic reduction
 (SCR), and oxidation catalyst;
- · Process Fugitives; and,
- Electrical equipment insulated with sulfur hexafluoride (SF₆).

EQUIPMENT LIST

The following devices are subject to this GHG PSD permit:

FIN EPN		Description		
VIC10	VIC10	Natural Gas-Fired Combined Cycle Combustion Turbine (GE.7FA.04 or equivalent). The combustion turbine is equipped with heat recovery steam generator (HRSG) and duct burners, dry low NOx (DLN) combustion system, and selective catalytic reduction (SCR), and oxidation catalyst.		

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	VIC10-FUG- NGAS	VIC10-FUG- NGAS	Process Fugitives	
	VIC10-INS- SF6	VIC10-INS- SF6	SF ₆ Insulated Electrical Equipment (i.e., circuit breakers) not to exceed 23 lbs	

I. GENERAL PERMIT CONDITION

A. PERMIT EXPIRATION

As provided in 40 CFR §52.21(r), this PSD Permit shall become invalid if construction:

- 1. is not commenced (as defined in 40 CFR §52.21(b)(9)) within 18 months after the approval takes effect; or
- 2. is discontinued for a period of 18 months or more; or
- 3. is not completed within a reasonable time.

Pursuant to 40 CFR §52.21(r), EPA may extend the 18-month period upon a written satisfactory showing that an extension is justified.

B. PERMIT NOTIFICATION REQUIREMENTS

Permittee shall notify EPA Region 6 in writing or by electronic mail of the:

- 1. date construction is commenced, postmarked within 30 days of such date;
- 2. actual date of initial startup, as defined in 40 CFR §60.2, postmarked within 15 days of such date; and
- 3. date upon which initial performance tests will commence, in accordance with the provisions of Section V, postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the performance test protocol required pursuant to Condition V.B.

C. FACILITY OPERATION

At all times, including periods of startup, shutdown, and maintenance, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, review of operating maintenance procedures and inspection of the facility.

D. MALFUNCTION REPORTING

- 1. Permittee shall notify EPA by mail within 48 hours following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in GHG emissions above the allowable emission limits stated in Sections II and III of this permit.
- 2. Within 10 days of the restoration of normal operations after any failure described in I.D.1., Permittee shall provide a written supplement to the initial notification that includes a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section II and III, and the methods utilized to mitigate emissions and restore normal operations.
- 3. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

E. RIGHT OF ENTRY

EPA authorized representatives, upon the presentation of credentials, shall be permitted:

- 1. to enter the premises where the facility is located or where any records are required to be kept under the terms and conditions of this PSD Permit;
- 2. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD Permit;
- 3. to inspect any equipment, operation, or method subject to requirements in this PSD Permit; and,
- 4. to sample materials and emissions from the source(s).

F. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of the facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD Permit and its conditions by letter; a copy of the letter shall be forwarded to EPA Region 6 within thirty days of the letter signature.

G. SEVERABILITY

The provisions of this PSD Permit are severable, and, if any provision of the PSD Permit is held invalid, the remainder of this PSD Permit shall not be affected.

H. ADHERENCE TO APPLICATION AND COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

Permittee shall construct this project in compliance with this PSD Permit, the application on which this permit is based, the TCEQ PSD Permit PSD-TX-1348 and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act.

II. ACRONYMS AND ABBREVIATIONS

AVO	Auditory, Visual, and Olfactory
BACT	Best Available Control Technology
CAA	Clean Air Act
CC	Carbon Content
CCS	Carbon Capture and Sequestration
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CH ₄	Methane
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CT	Combustion Turbine
EF	Emission Factor
EPN	Emission Point Number
FIN	Facility Identification Number
FR	Federal Register
GCV	Gross Calorific Value
GHG	Greenhouse Gas
GWP	Global Warming Potential
HHV	High Heating Value
lb	Pound
LDAR	Leak Detection and Repair
MMBtu	Million British Thermal Units
MSS	Maintenance, Start-up and Shutdown
N_2O	Nitrous Oxides
NSPS	New Source Performance Standards
O_2	Oxygen
PSD.	Prevention of Significant Deterioration
QA/QC	Quality Assurance and/or Quality Control
RATA	Relative Accuracy Test Audit
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TOC	Total Organic Carbon
TPY	Tons per Year

III. Annual Emission Limits

Annual emissions, in tons per year (TPY) on a 12-month, rolling total, shall not exceed the following:

Table 1. Annual Emission Limits1

TOYAL	EDM	Description	GHG Mass Basis		TPY	BACT Requirements
FIN	EPN	Description		TPY	CO ₂ e ^{2,3}	
		Natural Gas-	CO ₂	1,070,879.0		940 lb CO ₂ /MWh (gross) on a 12-month rolling average. Start-up and Shutdown emissions limited to 1,000 hours per year. MSS emissions are limited to 108 tons CO ₂ /hr. See Special Conditions IV.A.1. and Table 2.
.	. A	Fired Combined	CH₄	23	*	
VIC10	VIC10	Cycle Combustion Turbine (GE.7FA.04) ⁴	N₂O	2	1,072,053	
VIC10- FUG- NGAS	VIC10- FUG- NGAS	Process Fugitives	CH ₄	No Emission Limit Established ⁵	No Emission Limit Established ⁵	
VIC10- INS-SF6	VIC10- INS-SF6	SF ₆ Insulated Electrical Equipment	SF ₆	No Emission Limit Established ⁶	No Emission Limit Established ⁶	
Totals ⁷			CO ₂	1,070,879		,
ž.			CH ₄	41	1,072,498	
			N ₂ O	2	1,0/2,490	m-1
		*	SF ₆	0.000056	4.5	

1. Compliance with the annual emission limits (tons per year) is based on a 12-month rolling average.

2. The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations and include MSS activities. This total is rounded off for estimation purposes to two significant figures.

3. Global Warming Potentials (GWP): $CO_2 = 1$, $CH_4 = 25$, $N_2O = 298$, $SF_6 = 22,800$

4. Includes emissions during all operational modes, including purging venting associated with the CT and DB shutdown and maintenance events. CH₄ is vented via an automatic double block and bleed at the CTG during each shutdown event. Additionally, CH₄ is vented from the duct burner system each time the ducts are shutdown. Annual emissions for these activities are included in the annual CO₂e limit for VIC10.

5. Fugitive process emissions from EPN VIC10-FUG-NGAS are estimated to be 17.8 TPY CH₄, and 445 TPY CO₂e. Fugitive process emission totals are for information only and do not constitute an emission limit. The

emission limit will be a design/work practice standard as specified in the permit.

6. SF₆ emissions from EPA VIC10-INS-SF6 are estimated to be 0.000056 tpy SF₆ and 1.28 tpy CO₂e. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.

7. Totals are given for informational purposes only and do not constitute emission limits.

IV. SPECIAL PERMIT CONDITIONS

A. Requirements for Combustion Turbine Generator and Heat Recovery Steam Generator (EPN: VIC10)

1. BACT Emission Limits for EPN: VIC10

Table 2. BACT Emission Limits for EPN: VIC10

Combustion Turbine Model	Combustion Turbine Annual Firing Rate ¹ (MMBtu/hr) (HHV)	Duct Burners Annual Firing Rate ¹ (MMBtu/hr) (HHV)	Output Based Emission Limit, gross basis ² (lb CO ₂ /MWh)	MSS Emission Limit ^{2,3} (tons CO ₂ /hr)
GE.7FA.04 or equivalent	1,816	483	940	108

Limits are based on a 12-month rolling average.

a. For facility operations in a 1 x 1 x 1 plant configuration operation, compliance with the output based emission limit shall be determined by the following method. The CO₂ mass emission values shall be calculated over each operational hour of the compliance period and summed. The summed hourly CO₂ mass emission values shall be divided by the summed hourly total gross electrical output. Compliance shall be demonstrated on a 12-month rolling average.

b. For facility operations in a 2 x 2 x 1 plant configuration operation, compliance with the output based emission limit shall be determined as follows:

The hourly gross electric output from the existing non-modified steam turbine shall be apportioned based on either the measured steam load or measured heat input. A plan to demonstrate the apportionment of the gross electric output shall be submitted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days of the date of initial startup of the combustion turbine generator.

ii. The CO₂ mass emission values shall be calculated over each operational hour of the compliance period and summed. The summed hourly CO₂ mass emission values shall be divided by the combined sum of the total gross electrical output from the steam turbine (as determined by the corresponding apportionment calculations represented in the plan) and the total gross electrical load from the combustion turbine generator. The resulting quotient is added to the sum of quotients of the previous 11 operating months and divided by 12 to determine compliance with the 12-month rolling average.

c. Upon initial demonstration that the combustion turbine complies with the emission limit via emission tests, the Permittee shall not exceed the combustion turbine and duct burner annual firing rate, MMBtu/hr (HHV) from Table 2 on a 12-month rolling average. To

² This limit applies with and without duct burner firing during normal operation

³ Limit is based on a 12-month rolling total.

determine the limit, the Permittee shall calculate the average hourly heat input rate over the applicable compliance period consistent with equation F-20 and procedure provided in 40 CFR Part 75, Appendix F § 5.5.2 and the GCV of the fuel combusted for the corresponding compliance period. Add the quotient to the sum of the quotients of the previous 11 operating months and divide by 12 to determine the 12-month rolling average.

d. The Permittee shall not discharge or cause the discharge of emissions into the atmosphere in excess of the limits in tons of CO₂e on a 12-month rolling total as listed in Table 1.

e. The duct burners are limited to 4,375 hours of operation per year.

f. Startup and Shutdown events are limited to 1,000 hours per year and shall comply with the MSS BACT emission limit of 108 tons CO₂ per hour on a 12-month rolling total basis.

2. Emissions Monitoring for EPN: VIC10

a. Upon initial demonstration that the combustion turbine complies with the emissions limit via emission tests, the Permittee shall not exceed the CO₂e annual emission limit from Table 1 during normal operation. To determine the amount of CO₂e, the Permittee shall calculate the amount of CO₂, CH₄ and N₂O in short tons per month based on the equation G-4 of 40 CFR Part 75, Appendix G and 40 CFR Part 98, Appendix C, and the monthly hours of operation on a 12-month rolling total. The Permittee shall also use the default CH₄ and N₂O emission factors contained in Table C-2 of 40 CFR Part 98 and the measured actual hourly heat input (HHV) to determine compliance with the CH₄ and N₂O emission limits. The short tons per month values are multiplied by the respective Global Warming Potentials (GWP) contained in the Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1 to calculate the amount of CO₂e emitted in short TPY. The resulting CO₂e value is added to the previous 11 months to determine the 12 month rolling total of CO₂e emissions.

b. As an alternative, the Permittee may install and operate a volumetric stack gas flow monitor and associated data acquisition and handling system in accordance with the CO₂ CEMS system provided in 40 CFR 75.10(a)(3) and (a)(5). If a CO₂ CEMS system is utilized, the hourly CO₂ emission value shall be measured by installing and operating a volumetric stack gas flow monitor or calculating the volumetric stack gas flow by the procedures of 40 CFR 75, Appendix D and associated data acquisition and handling system in accordance with the CO₂ CEMS system provided in 40 CFR § 75.10.

c. In accordance with 40 CFR Part 75, Appendix D and 40 CFR Part 60, the Permittee shall ensure that all required fuel flow meters are installed, a periodic schedule for GCV fuel sampling is initiated and all certification tests are completed on or before the earlier of 90 unit operating days or 180 calendar days after the date the unit commences commercial operation (as defined in 40 CFR § 72.2).

d. The Permittee shall ensure compliance with the specifications and test procedures for fuel flow meter and/or CO₂ emission monitoring system at stationary sources, 40 CFR Part 75

and 40 CFR Part 60.

e. The Permittee shall meet the appropriate quality assurance requirements specified in 40 CFR Part 75, Appendixes D and F and 40 CFR Part 60 for the fuel flow meter and/or CO₂ emission monitoring system.

3. Work Practice and Operational Requirements for EPN: VIC10

a. The combined cycle combustion turbine and duct burners are limited to burning only natural gas. The gross calorific value of the fuel shall be determined monthly by the procedures contained in 40 CFR Part 75, Appendix F, § 5.5.2, and records shall be maintained of the monthly fuel gross calorific value for a period of five years. Upon request, the Permittee shall provide a sample and/or analysis of the fuel fired in the combustion turbine and/or duct burners or shall allow a sample to be taken by EPA for analysis.

b. The flow rate of the fuel combusted in the combustion turbine and duct burners shall be measured and recorded using an in-line flow meter and automatically record the data with a data acquisition and handling system. The steam load and/or heat input to the steam

turbine shall also be measured and recorded.

c. The Permittee shall measure and record the energy output of the apportioned steam turbine and combustion turbine (MWh, gross) on an hourly basis.

d. On or before the date of initial performance test required by 40 CFR § 60.8, and thereafter, the Permittee shall install, and continuously operate, and maintain the HRSGs equipped with a SCR and oxidation catalyst so emissions are at or below the emissions limits specified in this permit.

e. The Permittee shall perform an annual compliance test, at or above 90% of maximum load operations and conducted under such conditions to ensure representative performance of the affected facility. The conditions of the performance tests shall be

recorded and made available for review upon request.

f. On or after initial performance testing, the Permittee shall use BACT practices and designs represented in the permit application.

4. Requirements during Startup and Shutdown for EPN: VIC10

a. Permittee shall minimize emissions during startup and shutdown activities by operating and maintaining the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility.

b. Emissions during startup and shutdown activities shall be minimized by limiting the

duration of operation in startup and shutdown mode as follows:

i. A startup of EPN: VIC10 is initiated when the Data Acquisition and Handling System (DAHS) detects a flame signal (or equivalent signal) and ends when the permissives for the emission control system are met (i.e., steady state emissions compliance is achieved). A startup for the combustion turbine is limited to 10 hours (cold startup) per event.

ii. A shutdown of EPN: VIC10 begins when the load drops to the point at which steady state emissions compliance can no longer be assured and ends when a flame-off signal is detected. A shutdown for the combustion turbine is

limited to 60 minutes per event.

iii. Start-up and Shutdown events are limited to 1,000 hours per year.

c. Permittee must record the time, date, fuel heat input (HHV) in mmBtu/hr and duration of each startup and shutdown event in order to calculated the total CO₂e emissions. The records must include hourly CO₂ emission levels as measured by the

fuel flow meter (or CO₂ CEMS with volumetric stack gas flowrate) and the calculations based on the actual heat input for the CO₂, CO₂e, N₂O, and CH₄ emissions during each startup and shutdown event based on the equations represented in the permit application. These records must be kept for five (5) years following the date of such event.

d. During startup and shutdown, emissions from EPN: VIC10 shall comply with all provisions of BACT emission limitations in Special Condition IV.A.1.

B. Requirements for Fugitive Emissions EPNs: VIC10-FUG-NGAS and VIC10-INS-SF6

- 1. The Permittee shall implement and auditory/visual/olfactory (AVO) method for detecting leaking from natural gas piping components, and make observations on a daily basis.
- 2. For emission unit FUG-SF6, SF₆ emissions shall be calculated annually (calendar year) in accordance with the mass balance approach provided in equation DD-1 of the Mandatory Greenhouse Gas Reporting rules for Electrical Transmission and Distribution Equipment Use, 40 CFR Part 98, Subpart DD. Permittee shall not exceed insulated circuit breaker SF₆ capacity of 23 lbs.
- 3. Permittee shall equip the circuit breakers with a low pressure alarm and a low pressure lockout. The SF₆ leak detection system shall be able to detect leaks.
- 4. Permittee shall maintain a file of all records, data measurements, reports and documents related to the fugitive emission sources including, but not limited to, the following: all records or reports pertaining to maintenance performed, all records relating to compliance with the Monitoring and Quality Assurance and Quality Control (QA/QC) procedures outlines in 40 CFR § 98.304.

V. RECORDKEEPING AND REPORTING

- A. In order to demonstrate compliance with the GHG emission limits in Table 1, the Permittee will monitor the following parameters and summarize the data on a calendar month basis.
 - 1. Operating hours for all air emission sources;
 - 2. The natural gas fuel usage for all combustion sources, using continuous fuel flow monitors (a group of equipment can utilize a common fuel flow meter, as long as actual fuel usage is allocated to the individual equipment based upon actual operating hours and maximum firing rate); and
 - 3. Annual fuel sampling for natural gas.
- B. Permittee shall maintain a file of all records, data, measurements, reports, and documents related to the operation of the facility, including, but not limited to, the following: all records or reports pertaining to significant maintenance performed on any system or device at the plant; duration of startup, shutdown; the initial startup period for the emission units; pollution control units; malfunctions; all records relating to performance tests, calibrations, checks, and monitoring of combustion equipment; duration of an inoperative monitoring device and emission units with the required corresponding emission data; and all other information required by this permit recorded in a permanent form suitable for inspection. The file must be retained for not less than five years following the date of such measurements, maintenance, reports, and/or records.

- C. Permittee shall maintain records and submit a written report of all excess emissions to EPA semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator or authorized representative, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The report is due on the 30th day following the end of each semi-annual period and shall include the following:
 - 1. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;

2. Applicable time and date of each period during which the monitoring equipment was inoperative (monitoring down-time);

- 3. A statement in the report of a negative declaration; that is; a statement when no excess emissions occurred or when the monitoring equipment has not been inoperative, repaired or adjusted;
- 4. Any failure to conduct any required source testing, monitoring, or other compliance activities; and
- 5. Any violation of limitations on operation.
- **D.** Excess emissions shall be defined as any period in which the facility emissions exceed a maximum emission limit set forth in this permit, or a malfunction occurs causing an emissions exceedance.
- E. Excess emissions indicated by GHG emission performance testing or compliance monitoring shall be considered violations of the applicable emission limit for the purpose of this permit.
- F. Instruments and monitoring systems required by this PSD permit shall have a 95% onstream time on an annual basis.
- **G.** All records required by this PSD Permit shall be retained for not less than 5 years following the date of such measurements, maintenance, and reporting.
- H. Continuously means individual measurement no less frequent than once every 15 minutes. Electronic data may be reduced to hourly averages for recordkeeping purposes.

VI. SHAKEDOWN PERIODS

The combustion turbine emission limits and requirements in Conditions III and IV.A.1 shall not apply during combustion shakedown periods. Shakedown is defined as the period beginning with initial startup and ending no later than initial performance testing, during which the Permittee conducts operational and contractual testing and tuning to ensure the safe, efficient and reliable operation of the plant. The shakedown period shall not exceed the time period for performance testing as specified in 40 CFR § 60.8. The requirements of special condition I.C.

VII. PERFORMANCE TESTING

- A. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days of the date of initial startup of the combustion turbine generators, the Permittee shall perform an initial emission test for CO₂ and use emission factors from 40 CFR Part 98. The Permittee shall ensure that GHG emissions from the Combustion Turbine Generator and heat recovery steam generator in to the atmosphere do not exceed the limits in lbs CO₂/MWh (gross) from Table 2 during the test. To determine this BACT emission limit, Permittee shall calculate the limit based on the measured hourly energy output (MWh (gross)), the CTG is operating at, or above 90% of its design capacity with duct burner firing and the results shall be corrected to ISO conditions (59°F, 14.7 psia, and 67% humidity). Sampling shall be conducted in accordance with 40 CFR § 60.8 and EPA Method 3a or 3b for the concentration of CO₂.
 - 1. Multiply the CO₂ hourly average emission rate determined under maximum operating test conditions by 8,760 hours for the combustion turbines and 4,375 hours for the duct burners.
 - 2. If the above calculated CO₂ emission total does not exceed the tons per year (TPY) specified in Table 1, no compliance strategy needs to be developed. If the above calculated CO₂ emission total exceeds the tons per year (TPY) specified in Table 1, the facility shall:
 - a. Document the potential to exceed in the test report; and
 - b. Explain within the report how the facility will assure compliance with the CO₂ emission limit listed in Table 1.
- B. No later than 180 days after initial start-up, or restart after modification of the facility, performance test(s) must be conducted and a written report of the performance testing results furnished to the EPA with 60 days after the testing is completed. During subsequent operations, stack sampling shall be performed within 120 days if current production rates exceed the production rate during stack testing by 10 percent or greater, additional sampling may be required by TCEQ or EPA.
- C. Permittee shall submit a performance test protocol to EPA no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol, and any changes required by EPA. The owner or operator must provide the EPA at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the EPA the opportunity to have an observer present and/or to attend a pre-test meeting. If there is a delay in the original test date, the facility must provide at least 7 days prior notice of the rescheduled date of the performance test.
- D. Performance tests must be conducted at or above 90% of maximum load operations for the atmospheric conditions which exist during testing. The duct burners shall be tested at their maximum firing rate within the mechanical limits of the equipment for the atmospheric conditions which exists during the performance test while the turbine is operating as close to base load as possible. The tested turbine load shall be identified in the sampling report. The permit holder shall present in the performance test protocol the manner in which stack

sampling will be executed in order to demonstrate compliance with the emission limits contained in Section II.

- E. Air emissions from the HRSG exhaust stack shall be tested while firing at the minimum normal operating load (minimum normal load above 50 percent). The normal operating range consistent with emission limits is to be determined during stack testing. Air emissions that will be sampled and analyzed while at the minimum load include (but are not limited to) CO₂ to characterize the emissions at this load.
- F. Performance tests must be conducted under such conditions to ensure representative performance of the affected facility. The owner or operator must make available to EPA such records as may be necessary to determine the conditions of the performance tests.
- G. The owner or operator shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to this facility,
 - 2. Safe sampling platform(s),
 - 3. Safe access to sampling platform(s), and
 - 4. Utilities for sampling and testing equipment.
- H. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply.

VIII. AGENCY NOTIFICATIONS

Permittee shall submit GHG permit applications, permit amendments, and other applicable permit information to:

Multimedia Planning and Permitting Division EPA Region 6
1445 Ross Avenue (6 PD-R)
Dallas, TX 75202
Email: Group R6AirPermits@EPA.gov

Permittee shall submit a copy of all compliance and enforcement correspondence as required by this Approval to Construct to:

Compliance Assurance and Enforcement Division EPA Region 6 1445 Ross Avenue (6EN) Dallas, TX 75202